



ACC.14

TCT@ACC-12 | innovation in intervention

A1515

JACC April 1, 2014

Volume 63, Issue 12



## Stable Ischemic Heart Disease

### DRUG-ELUTING STENTS ARE STILL UNDERUSED IN GOVERNMENT INSURANCE AND UNINSURED: A META-ANALYSIS

Moderated Poster Contributions

Hall C

Sunday, March 30, 2014, 10:15 a.m.-10:30 a.m.

Session Title: Stable Ischemic Heart Disease: Percutaneous Revascularization

Abstract Category: 26. Stable Ischemic Heart Disease: Therapy

Presentation Number: 1204M-365C

Authors: *Jamie Elizabeth Diamond, Ana Palacio, Mauricio Cohen, Olveen Carrasquillo, Leonardo Tamariz, University of Miami Miller School of Medicine, Miami, FL, USA*

**Background:** Drug-eluting stents (DES) are better than bare-metal stents (BMS) in reducing restenosis. We determined if insurance influences the use of BMS or DES.

**Methods:** We conducted a meta-analysis including all studies in PUBMED in which DES and BMS use were reported in Medicare and Medicaid, HMO insurance, commercial insurance and uninsured populations. We used the DerSimonian and Laird random-effects models to calculate the pooled relative risk (RR) of stent use according to insurance.

**Results:** Our search strategy yielded 872 publications. We included 13 studies with 1,591,662 patients with Medicare or Medicaid, 260,530 commercially insured patients and 145,403 patients with no insurance who received either BMS or DES. BMS were more frequently used in patients with government insurance. The RR of using BMS was 1.19; 95% CI, 1.14-1.25;  $p < 0.01$  for those with government insurance and the RR of BMS use was 1.40; 95% CI, 1.19-1.63;  $p < 0.01$  for those with no insurance when compared with commercial insurance. This same trend was seen when stratified by insurance types (Table).

**Conclusion:** BMS are used more frequently in patients with government and no insurance, despite the proven clinical benefit of DES. Insurance status plays an important role in physicians' decisions regarding stent usage.

Table: BMS vs. DES Use by Insurance Type

Type of insurance	RR	CI	P-Value
Government vs. Commercial	1.19	1.14-1.25	0.01
Medicare vs. Commercial	1.11	1.03-1.21	0.01
Medicaid vs. Commercial	1.24	1.11-1.40	0.01
No insurance vs. Commercial	1.40	1.19-1.63	0.01
HMO vs. Commercial	1.05	1.00-1.09	0.06